

Form PTO 109 INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)	Docket Number (Optional) MMO-001.01	Application Number 10/657,729
	Applicant Ethridge et al.	
	Filing Date September 8, 2003	Group Art Unit 2123

U.S. PATENT DOCUMENTS

EXAMINER INITIALS	DOCUMENT NUMBER		DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
mcj	A	US 6,314,545	November 6, 2001	Kapur et al.	716	5	Nov. 6, 1998
mcj	B	US 6,051,027	April 18, 2000	Kapur et al.	703	5	July 16, 1998
mcj	C	US 6,064,808	May 16, 2000	Kapur et al.	7B-395	500-232	Aug. 1, 1997

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages Etc.)

mcj	D	International Search Report, International Application Number PCT/US03/28229, dated May 13, 2004, all pages.				
mcj	E	KOLM, P., et al. "Numerical Quadratures for Singular and Hypersingular Integrals", Comput. Math. Appl. (UK), Computers & Mathematics with Applications, Feb. 2001, XP002280179, ISSN: 0898-1221, Elsevier, U.K., Vol. 41, No. 3-4, pp. 327-352.				
mcj	F	YARVIN, N., et al. "An Improved Fast Multipole Algorithm for Potential Fields on the Line", SIAM Journal on Numerical Analysis, SIAM, U.S.A., Vol. 36, No. 2, 1999, XP008030571, pp. 629-666.				
mcj	G	PLACE J., et al. "Efficient Numerical Integration Using Gaussian Quadrature", Simulation, Simulation Councils U.S.A., October, 1999, Vol. 73, No. 4, XP008030556, pp. 232-238.				
mcj	H	YARVIN, N. and ROKHLIN, V., "Generalized Gaussian Quadratures and Singular Value Decompositions of Integral Operators", SIAM J. Sci. Comput. 20,6 (1999), pp. 699-718.				
mcj	I	DARVE, E., "The Fast Multipole Method: Numerical Implementation", Journal of Computational Physics 160, pp. 195-240 (2000).				
mcj	J	GREENGARD, L. and ROKHLIN, V., "A Fast Algorithm for Particle Simulations", Journal of Computational Physics 135, pp. 280-292 (1997).				
mcj	K	GREENGARD, L., HUANG, J., ROKHLIN, V. and WANDZURA, S., "Accelerating Fast Multipole Methods for Low Frequency Scattering", IEEE Computational Science and Engineering 5, (1998), pp. 1-12				
mcj	L	CHENG, H., GREENGARD, L., and ROKHLIN, V., "A Fast Adaptive Multipole Algorithm in Three Dimensions", Journal of Computational Physics 155 (1999), pp. 468-498.				
mcj	M	GREENGARD, L. and LEE, J-Y., "A Direct Adaptive Poisson Solver of Arbitrary Order Accuracy", Journal of Computational Physics 125 (1996), pp. 415-424.				
mcj	N	BEATSON, R. and GREENGARD, L., "A Short Course on Fast Multipole Methods", in Wavelets, Multilevel Methods and Elliptic PDEs, 1997, Oxford University Press, pp. 1-37.				
mcj	O	DARVE, E., "Efficient Fast Multipole Method for Low Frequency Scattering", Center for Turbulence Research, Annual Research Briefs, 2001, Stanford University, Stanford, California, pp. 259-270.				

EXAMINER

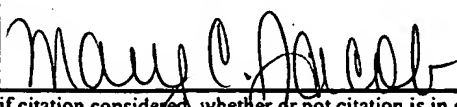
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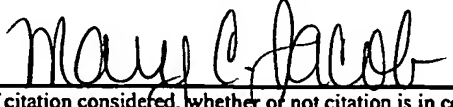
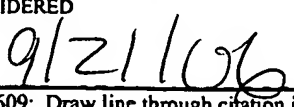
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Form PTO-1449		Docket Number (Optional) MMO-001.01		Application Number 10/657,729	
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MCJ	P	GREENGARD, L. and HUANG, J., "A New Version of the Fast Multipole Method for Screened Coulomb Interactions in Three Dimensions", December 21, 2001, pp. 1-18.			
MCJ	Q	WHITE, T.P. et al., "Calculations of Air-Guided Modes in Photonic Crystal Fibers Using the Multipole Method", Optics Express, 17 December 2001, Vol. 9, No. 13, pp. 721-732.			
MCJ	R	EL-SHENAWE, et al., "Monte Carlo Simulations of Electromagnetic Wave Scattering from a Random Rough Surface with Three-Dimensional Penetrable Buried Object: Mine Detection Application Using the Steepest-Descent Fast Multipole Method", J. Opt. Soc. Am. A, December 2001, Vol. 18, No. 12, pp. 3077-3084.			
MCJ	S	JANDHYALA, Vikram, et al., "Fast Algorithm for the Analysis of Scattering by Dielectric Rough Surfaces", J. Opt. Soc. Am. A, July 1998, Vol. 15, No. 7, pp. 1877-1885.			
MCJ	T	CHENG, H., ROKHLIN, V. and YARVIN, N., "Nonlinear Optimization, Quadrature, and Interpolation", J. Optim., September 24, 1999, Vol. 9, No. 4, SIAM pp. 901-923.			
MCJ	U	ALPERT, Bradley K., "Hybrid Gauss-Trapezoidal Quadrature Rules", SIAM J. Sci. Comput., April 27, 1999, Vol. 20, No. 5, pp. 1551-1584.			
MCJ	V	CANINO, Lawrence S. et al., "High-Order Nyström Discretization for Faster, More Accurate Scattering Calculations", in Conference Proceedings, 14 th Annual Review of Progress in Applied Computational Electromagnetics, March 16-20, 1998, Monterey, California, pp. 413-419.			
MCJ	W	WANDZURA, Stephen and XIAO, Hong, "Quadrature Rules on Triangles in R^2 ", Research Report YALEU/DCS/RR-1168, November 30, 1998, pp. 1-15.			
MCJ	X	KAPUR, Sharad and ROKHLIN, Vladimir, "High-Order Corrected Trapezoidal Quadrature Rules for Singular Functions", SIAM J. Numer. Anal., August 1997, Vol. 34, No. 4, pp. 1331-1356.			
MCJ	Y	SONG, Jiming et al., "Multilevel Fast Multipole Algorithm for Electromagnetic Scattering by Large Complex Objects", IEEE Transactions on Antennas and Propagation, October 1997, Vol. 45, No. 10, pp. 1482-1493.			
MCJ	Z	MA, J., ROKHLIN, V. and WANDZURA, S., "Generalized Gaussian Quadrature Rules for Systems of Arbitrary Functions", SIAM J. Numer. Anal., June 1996, Vol. 33, No. 3, pp. 971-996.			
MCJ	AA	STRAIN, John, "Locally Corrected Multidimensional Quadrature Rules for Singular Functions", SIAM J. Sci. Comp., 1995, Vol. 16, No. 4, pp. 992-1017.			
MCJ	BB	SONG, J.M. and CHEW, C., "Multilevel Fast-Multipole Algorithm for Solving Combined Field Integral Equations of Electromagnetic Scattering", Microwave and Optical Technology Letters, September 1995, Vol. 10, No. 1, pp. 14-19.			
MCJ	CC	ALPERT, Bradley K., "High-order Quadratures for Integral Operators with Singular Kernels", Journal of Computational and Applied Mathematics, 1995, 60, pp. 367-378.			
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mcj	DD	NABORS, K., et al., "Preconditioned, Adaptive, Multipole-Accelerated Iterative Methods for Three-Dimensional First-Kind Integral Equations of Potential Theory", SIAM J. Sci. Comput., May 1994, Vol. 15, No. 3, pp. 713-735.			
mcj	EE	NABORS, Keith, KIM, Songmin, and WHITE, Jacob, "Fast Capacitance Extraction of General Three-Dimensional Structures", IEEE Transactions on Microwave Theory and Techniques, July 1992, Vol. 40, No. 7, pp. 1496-1506.			
mcj	FF	ETHRIDGE, Frank, "Fast Algorithms for Volume Integrals in Potential Theory", UMI Dissertation Services, Ann Arbor, Michigan, September 2000, pp. 1-84.			
mcj	GG	DEMBART, Ben and YIP, Elizabeth, "A 3D Fast Multipole Method for Electromagnetics with Multiple Levels", 1995, in Conference Proceedings, 11 th Annual Review of Progress in Applied Computational Electromagnetics, Monterey, California, pp. 621-628.			
mcj	HH	ROKHLIN, V., "Rapid Solution of Integral Equations of Classical Potential Theory", Journal of Computational Physics, September 15, 1985, Vol. 60, no. 2, pp. 187-207.			
mcj	II	GREENGARD, L. and ROKHLIN, V., "The Rapid Evaluation of Potential Fields in Three Dimensions", Vortex Methods, Proceedings of the UCLA Workshop, May 20-22, 1987, Los Angeles, California, pp. 121-141.			
mcj	JJ	GREENGARD, Leslie F., "The Rapid Evaluation of Potential Fields in Particle Systems", An ACM Distinguished Dissertation 1987, The MIT Press, 1988, Cambridge, Massachusetts, pp. i-92.			
mcj	KK	CARRIER, J., GREENGARD, L. and ROKHLIN, V., "A Fast Adaptive Multipole Algorithm for Particle Simulations", SIAM J. Sci. Stat. Comput., July 1988, Vol. 9, No. 4, pp. 669-686.			
mcj	LL	ROKHLIN, V., "Rapid Solution of Integral Equations of Scattering Theory in Two Dimensions", Journal of Computational Physics, February 1990, Vol. 86, No. 2, pp. 414-439.			
mcj	MM	ROKHLIN, V., "Diagonal Forms of Translation Operators for the Helmholtz Equation in Three Dimensions", Applied and Computational Harmonic Analysis, 1993, Vol. 1, pp. 82-93.			
mcj	NN	GREENGARD, Leslie and ROKHLIN, Vladimir, "A New Version of the Fast Multipole Method for the Laplace Equation in Three Dimensions", Acta Numerica, Cambridge University Press, 1997, pp. 229-269.			
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